

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An apparatus comprising:
 - a network circuit to couple to a local area network (LAN) through a transmission line, a first section of the transmission line to serve as wiring for the LAN;
 - a modem to couple to a wide area network (WAN) through the transmission line;
 - a digital-to-analog (D/A) converter to couple to a telephone network through the transmission line;
 - a radio transceiver coupled to the network circuit, the modem and the D/A converter, the radio transceiver to receive a service request from a wireless communication device, to establish a connection to the wireless communication device,
 - wherein a connection type is based on the service request to, receive wireless
 - communication data from a the wireless communication device and to route the wireless communication data to at least one device on the LAN, the WAN or the telephone network through the network circuit, the modem or the D/A converter, respectively,
 - wherein routing is determined by the connection type.

2. (Previously Presented) The apparatus of claim 1, ~~wherein the wireless communication data received by the radio transceiver is based on a BLUETOOTH™ standard, and wherein the radio transceiver is a BLUETOOTH™ access device for receiving the wireless communication data from the wireless communication device,~~ wherein the service request is in response to an indication of multiple services provided, wherein the service request specifies at least one of the provided services, and wherein the provided services includes a cordless telephony service, a dial-up networking service, and a network access service.

3. (Original) The apparatus of claim 1, wherein the transmission line is a Plain Old Telephone Service line.

4. (Original) The apparatus of claim 1, the wireless communications data is received from a group consisting of a mobile telephone, a mobile computer, and a personal digital assistant.

5. (Currently Amended) The apparatus of claim 1, wherein the wireless communications data is routed to the D/A converter when the wireless communications data is voice data, wherein the voice data includes data received from a cordless telephony connection.

6. (Original) The apparatus of claim 1, wherein the wireless communications data is routed to the modem when the wireless communications data is data being routed to the Internet.

7. (Currently Amended) An apparatus comprising:

a network circuit to couple to a transmission line, a first section of the transmission line to serve as wiring for a local area network (LAN), the network circuit to transmit at a first frequency range on the transmission line;

a modem to couple to a wide area network (WAN) through the transmission line, the modem to transmit at a second frequency range on the transmission line;

a digital/analog (D/A) converter to couple to a telephone network through the transmission line, the D/A converter to transmit at the second frequency range on the transmission line; and

a radio transceiver to receive a service request from at least one wireless communication device, to establish a connection to the at least one wireless communication device, wherein a connection type is based on the service request, to receive wireless communication data based on a BLUETOOTH™ standard from the at least one wireless communication device, the radio transceiver to route the wireless communication data to the LAN, the WAN or the telephone network through the network circuit, the modem or the D/A converter, respectively, ~~depending on a destination of the wireless communication data~~ wherein routing is determined by the connection type.

8. (Original) The apparatus of claim 7, wherein the LAN is located in a residential home.
9. (Original) The apparatus of claim 7, wherein the transmission line is a Plain Old Telephone Service line.
10. (Original) The apparatus of claim 9, wherein the apparatus is coupled through a RJ-11 socket to the POTS line.
11. (Currently Amended) The apparatus of claim 9, wherein the wireless communication data is routed to the D/A converter when the wireless communication data includes voice data, wherein the voice data includes data received from a cordless telephony connection.
12. (Original) The apparatus of claim 9, wherein the wireless communication data is routed to the modem when the wireless communication data is data being routed to devices coupled to the WAN.
13. (Original) The apparatus of claim 9, wherein the wireless communication data is routed to the network circuit when the wireless communication data is data being routed to devices coupled to the LAN.

14. (Currently Amended) A system comprising:

- a processing unit;
- a memory;
- a network circuit coupled to the processing unit and the memory;
- a filter coupled to the network circuit, the filter to couple to a local area network (LAN) through a transmission line, a first section of the transmission line to serve as wiring for the LAN;
- a modem coupled to the processing unit and the memory, the modem to couple to a wide area network (WAN) through the transmission line;
- a digital-to-analog (D/A) converter coupled to the processing unit and the memory, the D/A converter to couple to a telephone network through the transmission line;
- a radio transceiver coupled to processing unit, the memory, the network circuit, the modem and the D/A converter, the radio transceiver to receive a service request from a wireless communication device, to establish a connection to the wireless communication device, wherein a connection type is based on the service request, to receive wireless communication data and to route the wireless communication data to at least one device on the LAN, the WAN or the telephone network through the network circuit, the modem or the D/A converter, respectively, wherein routing is determined by the connection type.

15. (Original) The system of claim 14, wherein the wireless communication data received by the radio transceiver is based on a BLUETOOTH™ standard.
16. (Original) The system of claim 14, wherein the transmission line is a Plain Old Telephone Service line.
17. (Currently Amended) A method comprising:
receiving a service request from at least one wireless communication device;
connecting to the at least one wireless communication device, wherein a
connection type is based on the service request;
receiving wireless communication data from the at least one wireless communication device; and
routing the wireless communication data through a same transmission line to at least two devices coupled to at least two different networks, wherein a first section of the same transmission line serves as wiring in one of the at least two different networks, wherein routing is determined by the connection type.
18. (Original) The method of claim 17, wherein the routing is based on connections between the at least one wireless communication device and the at least two devices.
19. (Original) The method of claim 17, wherein the same transmission line is a Plain Old Telephone Service line.

20. (Currently Amended) A method comprising:

receiving a service request from at least one wireless communication device;

connecting to the wireless communication device, wherein a connection type is based on the service request;

receiving wireless communication data from the at least one wireless communication device; ~~and~~

formatting the wireless communication data into analog data at a first frequency range upon determining the wireless communication data is for a cordless telephony service;

formatting the wireless communication data into analog data at the first frequency range upon determining the wireless communication data is for a dial-up network service;

formatting the wireless communication data into network data packets at a second frequency range upon determining the wireless communication data is for a network access service; and

transmitting the analog data at the first frequency range and the network data packets at the second frequency range to a number of devices on a number of networks along a same transmission line, wherein a first section of the same transmission line serves as wiring a first network of the number of networks, wherein transmitting is determined by the connection type.

21. (Original) The method of claim 20, wherein the same transmission line is a Plain Old Telephone Service line.

22. (Original) The method of claim 21, wherein the first network is a local area network.

23. (Currently Amended) A machine-readable medium that provides instructions, which when executed by a machine, cause said machine to perform operations comprising:

receiving a service request from at least one wireless communication device;

connecting to the wireless communication device, wherein a connection type is based on the service request;

receiving wireless communication data from the at least one wireless communication device; and

routing the wireless communication data through a same transmission line to at least two devices coupled to at least two different networks, wherein a first section of the same transmission line serves as wiring in one of the at least two different networks, wherein routing is determined by the connection type.

24. (Original) The machine-readable medium of claim 23, wherein the routing is based on connections between the at least one wireless communication device and the at least two devices.

25. (Original) The machine-readable medium of claim 23, wherein the same transmission line is a Plain Old Telephone Service line.

26. (Currently Amended) A machine-readable medium that provides instructions, which when executed by a machine, cause said machine to perform operations comprising:

receiving a service request from at least one wireless communication device;

connecting to the wireless communication device, wherein a connection type is based on the service request;

receiving wireless communication data from the at least one wireless communication device; ~~and~~

formatting the wireless communication data into analog data at a first frequency range upon determining the wireless communication data is for a cordless telephony service;

formatting the wireless communication data into analog data at the first frequency range upon determining the wireless communication data is for a dial-up network service;

formatting the wireless communication data into network data packets at a second frequency range upon determining the wireless communication data is for a network access service; and

transmitting the analog data at the first frequency range and the network data packets at the second frequency range to a number of devices on a number of networks along a same transmission line, wherein a first section of the same transmission line serves as wiring a first network of the number of networks, wherein transmitting is determined by the connection type.

27. (Original) The machine-readable medium of claim 26, wherein the same transmission line is a Plain Old Telephone Service line.

28. (Original) The machine-readable medium of claim 26, wherein the first network is a local area network.